

Technical Note

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news releases; the note also provides some perspective on the estimates. This month, in addition, it contains information on the upcoming comprehensive revision to the national income and product accounts.

In the next several days, additional material on the second-quarter GDP estimate will be posted to BEA's Web site < www.bea.doc.gov > . In a few weeks, the estimates will be published in BEA's monthly journal, the *Survey of Current Business*, along with a more detailed analysis and with a detailed preview of the comprehensive revision.

Gross Domestic Product, Second Quarter 1999 (Advance)

Real GDP: Based on source data available at this time, BEA estimates that real GDP increased 2.3 percent (annual rate) in the second quarter of 1999 after increasing 4.3 percent in the first.

The slowdown in GDP growth was mainly accounted for by a slowdown in consumer spending and a downturn in government spending that more than offset an upturn in exports.

The 2.3-percent GDP growth in the second quarter was largely accounted for by increases in consumer spending, in business fixed investment, and in exports. The increase in GDP was moderated by an increase in imports and a decrease in inventory investment.

Motor vehicle output, which is reflected in both the final sales and inventory investment components of GDP, increased in the second quarter after decreasing in the first quarter. GDP excluding motor vehicle output increased 2.0 percent in the second quarter after increasing 5.3 percent in the first.

Final sales of computers contributed to GDP growth in both the first and the second quarters. GDP less final sales of computers increased 2.0 percent in the second quarter after increasing 4.1 percent in the first.

Prices: The chain-type price index for gross domestic purchases increased 2.1 percent in the second quarter after increasing 1.2 percent in the first. Excluding food and energy prices, which are normally more volatile than many other prices, the price index increased 1.4 percent after increasing 1.3 percent. The price index for GDP, which measures the prices paid for goods and services produced in the United States, increased 1.6 percent, or 0.5 percentage point less than the price index for gross domestic purchases. The price index for gross domestic purchases, unlike that for GDP, includes the prices of imports and excludes the prices of exports. Import prices increased 4.0 percent in the second quarter, reflecting a sharp increase in the price of imported petroleum; in the first quarter, import prices decreased 3.3 percent.

Disposition of personal income: Disposable personal income (DPI) in current dollars increased 4.9 percent in the second quarter, after increasing 4.8 percent in the first. Personal saving measures saving out of current income and is defined in the national income and product accounts as DPI less personal outlays. Personal saving was a negative \$70.7 billion in the second quarter, compared with negative \$45.5 billion in the first. The personal saving rate--saving as a percentage of disposable personal income--was a negative 1.1 percent in the second quarter; in the first quarter, it had been a negative 0.7 percent.

Source data for the advance estimate

The advance estimate for the second quarter is based on source data that are incomplete or subject to further revision by the source agency. Three months of source data are available for consumer spending on goods, investment in producers' durable equipment other than aircraft, motor vehicle sales and inventories, federal government spending, and consumer, producer, and international prices. Only two months of data are available for most other key data sources; BEA's assumptions for the third month for these series are shown in table A.

- For private nonresidential buildings and for state and local government construction, increases were assumed for June, following decreases in May in both series.
- For shipments of commercial aircraft, a decrease in June was assumed, based on trade source data.
- For exports and for imports of goods, excluding gold, increases were assumed for June; because the assumed increase for exports was greater than that assumed for imports, the assumed goods deficit for June is smaller than the deficit for May.
- For the change in non-motor-vehicle inventories, an increase in June was assumed.

The source data and assumptions shown in table A are expressed in current dollars and do not reflect the impact of price changes. Consequently, for some of the series shown in table A, the quarterly changes in current dollars may differ substantially from the changes that enter the calculation of real GDP. As previously noted, in the second quarter, there were unusually large increases in energy prices. As a result, there was an increase in the second-quarter change in inventories series from the source agency, but a decrease in the corresponding component of real GDP.

Comprehensive NIPA Revision Scheduled for October 28

Beginning with the GDP news release on October 28, BEA will present the results of its 11th comprehensive revision of the national income and product accounts (NIPA's). This part of today's "Technical Note" provides an overview of the major improvements to be introduced; beginning with the August issue, the Survey of Current Business will present a series of articles that discuss the comprehensive revision in detail.

Comprehensive revisions, which are usually prepared at least once every 5 years, incorporate three major types of improvements: (1) Definitional and classificational changes that update the accounts to more accurately portray the evolving U.S. economy, (2) statistical changes that update the NIPA estimates to reflect the introduction of new and improved methodologies and the incorporation of newly available and revised source data, and (3) presentational changes that update the NIPA tables to reflect the aforementioned changes and to make the tables more informative.

For the upcoming comprehensive revision, BEA is planning a number of major improvements, including the following:

- recognition of computer software as fixed investment,
- treatment of government retirement plans symmetrically with private plans,
- elimination of an accounting convention that results in negative profits of noninsured pension plans,
- reclassification of certain transactions as capital transfers,
- incorporation of newly available consumer price indexes (CPI's) for personal consumption expenditures (PCE),
- an improved measure of the growth of real output of banks,
- new presentations of the contributions of components to changes in real GDP and other aggregates,
- a new combined motor vehicle output table, and
- a table integrating the estimates of the stocks of assets and the investment flows.

Business and government purchases of software, as well as own-account production of software, will be recognized as fixed investment ("own-account" refers to software produced by a business or a government agency for its own use). Currently, except software embedded in equipment, business purchases and own-account production of software are classified as inputs to production, and government purchases and own-account production of software are classified as government consumption expenditures. Newly developed estimates of the output and prices of prepackaged, custom, and own-account software investment will be incorporated into the estimates of GDP beginning with 1959.

The treatment of government employee retirement plans will change to make it more similar to the treatment of private pension plans. Under the new treatment, savings associated with government employee retirement plans will be shifted to the personal sector. Currently, these savings are included in the government

current surplus or deficit, so this change will not affect national saving.

The accounting convention used to measure the corporate profits of private noninsured pension plans will be changed, eliminating a large negative value that is included in the profits estimate of insurance carriers. Currently, the profits of these plans are recorded as a negative value (equal to their dividends received) in order to shift all of their property incomes (dividends, interest, and rent) from business saving to personal saving. Under the new treatment, property incomes received by these plans will be recorded as received directly by persons. This change, which will also result in an offsetting decrease in net interest, will not affect national income, personal saving, or business saving.

Improvements will be made to the measures of national saving, the government current surplus or deficit, and personal saving by classifying certain transactions into a new NIPA category, "capital transfers," which will be presented in a new table. These transactions will be removed from the NIPA current accounts because they mainly represent transfers of the stock of assets and do not affect the level of disposable income in the current period. Capital transfers will include federal government investment grants to state and local governments, estate and gift taxes, and certain international transfers that were recently reclassified in the U.S. international transactions accounts. Recognizing these transactions as capital transfers will improve the international comparability of saving measures.

Using newly available price indexes from the Bureau of Labor Statistics (BLS) that reflect recent improvements in the CPI, real PCE will be recalculated beginning with 1978. These new series will provide consistent, historical price indexes that incorporate such improvements as the use of a geometric-mean-type formula to account for consumer substitution within CPI item categories. The CPI's based on the geometric-mean-type formula are currently used in the NIPA's for deflation of PCE categories beginning with 1995.

Using an output index published by BLS, real bank output will be recalculated beginning with 1967. The new estimate will be a weighted average of various measures of bank transactions and volume of services. Currently, the estimate of real bank output is based on hours worked by bank employees. Introduction of the new measure will result in an upward revision to the rate of growth of real bank output and will affect several components of GDP, as well as the gross product of the banking industry.

The revised estimates released in October will begin with 1959; comparable estimates back to 1929 will be released early next year. As part of the statistical changes introduced in the revision, the chain-type quantity and price indexes and chained-dollar estimates will reflect a shift in the reference year from 1992 to 1996.

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Attachment

**Table A.--KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATES OF GDP
FOR THE SECOND QUARTER OF 1999**

For many of the key series used to prepare the advance estimate of GDP, including sales of retail stores, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods (other than aircraft), federal defense spending, and consumer and producer price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for June 1999 are shown in the last column of the table. For most series shown, the data for May are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Bureau of the Census.

		1999					
		Jan.	Feb.	Mar.	Apr.	May.	Jun.*
Private fixed investment:							
Nonresidential buildings:							
1	Value of new nonresidential construction put in place.....	185.8	189.0	189.3	182.1	179.6	188.5
Producers' durable equipment:							
2	Manufacturers' shipments of complete aircraft.....	58.3	37.4	34.4	41.2	37.9	33.3
Residential structures:							
Value of new residential construction put in place:							
3	1-unit structures.....	208.7	210.3	212.4	211.4	210.6	208.9
4	2-or-more-unit structures.....	26.4	27.8	29.1	28.2	27.0	27.7
Change in business inventories:							
5	Change in inventories for manufacturing and trade (except nonmerchant wholesalers) for industries other than motor vehicles and equipment in trade..	-8.0	27.2	9.6	7.1	20.1	28.9
Net exports:							
Exports of goods:							
6	U.S. exports of goods, balance-of-payments basis.....	663.2	656.4	651.9	663.2	655.6	667.7
6a	Excluding gold.....	660.5	653.4	649.0	659.2	653.4	664.7
Imports of goods:							
7	U.S. imports of goods, balance-of-payments basis.....	943.4	958.5	960.1	967.2	994.1	1002.6
7a	Excluding gold.....	939.8	955.8	956.6	964.0	991.1	999.6
8	Net exports of goods.....	-280.2	-302.1	-308.2	-304.0	-338.5	-334.9
8a	Excluding gold.....	-279.3	-302.4	-307.6	-304.8	-337.7	-334.9
State and local government:							
9	Value of new construction put in place.....	140.5	146.5	146.1	140.6	139.5	143.8